FINAL PROGRAM
Second Chemical Congress
of the North American Continent
San Francisco Page 44

Chemical & Engineering NEWS

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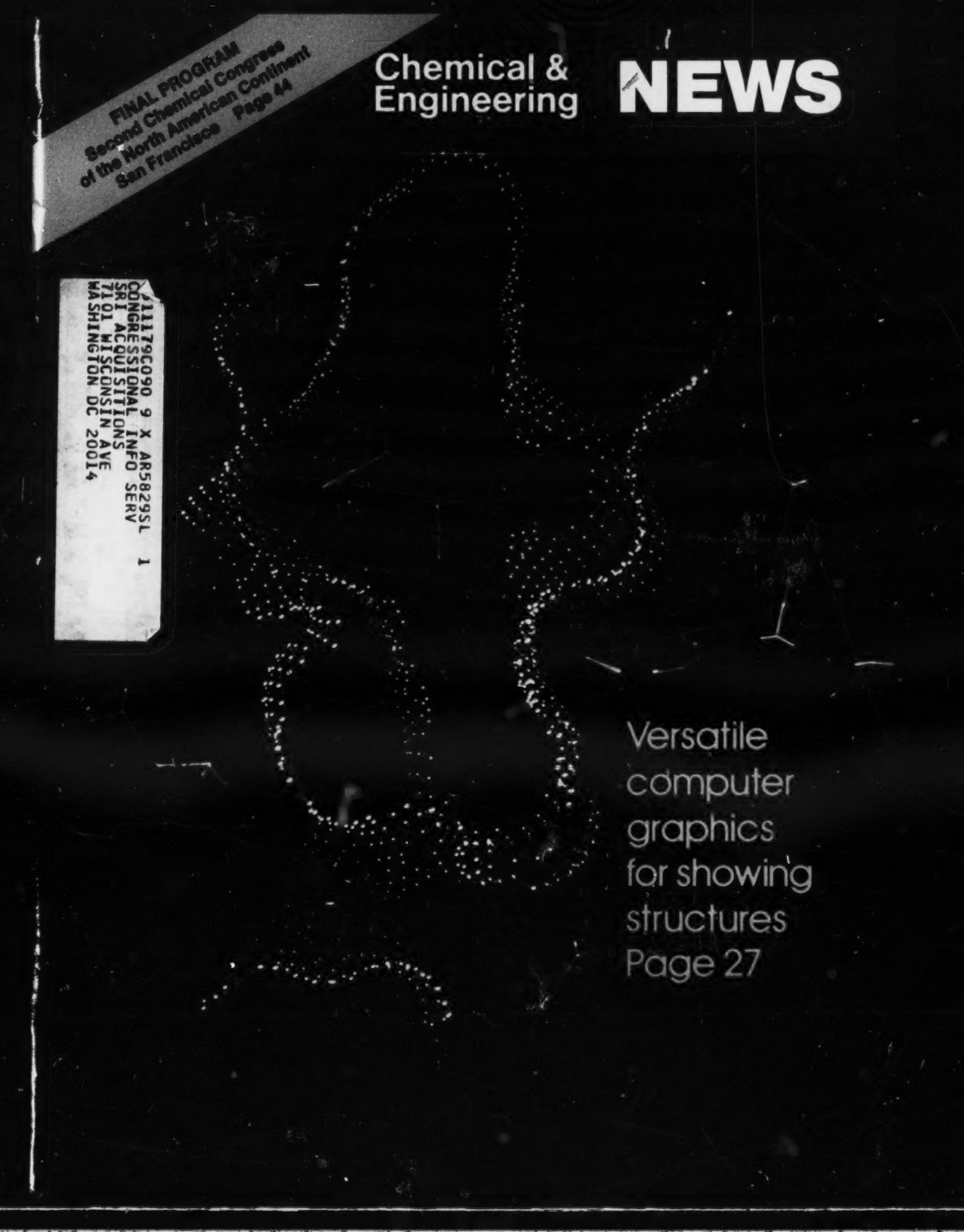

Versatile computer graphics for showing structures Page 27

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Chemical & Engineering NEWS

Cover: Computer graphics system, developed at the University of California, San Francisco, can display important molecular features, such as how the hormone thyroxine (magenta, with its molecular surface depicted by dots) fits into protein prealbumin's specific binding site, depicted by green dots

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News of the Week

- ***Justice sues group of chemical companies*** *for illegal dumping of toxic wastes, cites them as generators of the waste.* ***Page 10***
- ***Second-quarter earnings*** *of U.S. chemical companies reflect poor markets and rising raw materials costs.* ***Page 10***
- ***Decline in U.S. chemical production*** *is accelerating, roughly paralleling the drop in overall industrial output.* ***Page 11***
- ***Chemotherapy should be an adjunct to surgery*** *for some breast cancer patients, panel advises at NIH conference.* ***Page 12***
- ***Corporate merger activity*** *slowed in second-quarter 1980.* ***Page 12***
- ***GAO investigation*** *of effectiveness of FDA's Bureau of Biologics, prompted by five Senators, finds few failings.* ***Page 12***

Business

- ***Borden pushes into chemicals market*** *with five-year plan to redirect capital into chemicals and specialty foods.* ***Page 17***

International

- ***Jacques Solvay,*** *new president of CEFIC, outlines problems for European chemical industry.* ***Page 19***

Government

- ***Department of Energy*** *funds studies and projects to stimulate U.S. production of synthetic fuels.* ***Page 22***

Science

- ***Computer graphics display system*** *shows three-dimensional color images of molecule surfaces that can be manipulated to depict molecular interactions.* ***Page 27***

Education

- ***Chemical education for the physically handicapped*** *and for women and minorities was the theme of the Sixth Biennial Chemical Education Conference.* ***Page 31***

Technology

- ***In-situ gasification of low-grade coal*** *reserves in the West is feasible, data from Wyoming study indicate.* ***Page 37***
- ***Interox America*** *hopes to crack U.S. detergent market with new process for making sodium percarbonate.* ***Page 39***

ACS News

- ***Official reports*** *of society, board, and other committees at the June ACS Board of Directors meeting.* ***Page 41***
- ***ACS books, journals,*** *other educational services viewed by delegates of China National Publications Import Corp.* ***Page 42***

Final Program

- ***Complete technical program,*** *listing of social events for the Second Chemical Congress of North American Continent to be held in San Francisco next month.* ***Page 44***

a 10% sales increase at Rohm & Haas, earnings fell 20% on a 3% sales rise at Stauffer Chemical, and earnings fell 16% on a 4% sales increase at Union Carbide.

Although official earnings statements have yet to be released, Du Pont and Celanese are predicting falling earnings for the second quarter. At a security analysts meeting in Frankfurt, West Germany, Du Pont's senior vice president Richard E. Heckert said that the company's second-quarter earnings will be "down significantly from the $1.59 per share earned in the second quarter of last year." Du Pont's sales, he says, will be up slightly from the $3.24 billion level of the 1979 second quarter, but the gain will be due almost entirely to higher selling prices.

Celanese's earnings for the second quarter are expected to fall about 45% from last year's second-quarter income of $45 million. In a registration statement with the Securities & Exchange Commission, Celanese said that the economic downturn in the U.S. caused a sharp falloff in demand for chemicals starting in mid-April and that weak demand continues for fibers, plastics, and specialty products for autos, housing, and textiles.

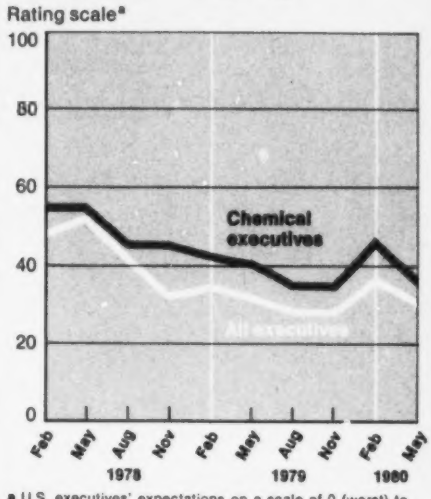
The downturn in housing is having a big impact on other companies, too. PPG Industries' earnings for the second quarter fell 31.2% to $39.7 million from the second quarter last year. The big surprise at PPG is that sales also are off—almost 4% to about $754 million.

And at Owens-Corning Fiberglas, which is even more closely tied to the housing and other durable goods markets, the situation is worse. Sales at Owens-Corning for the second quarter fell 5.6% from a year ago to about $496 million. For the quarter the company lost $2.1 million, compared with earnings of $17.2 million in second-quarter 1979.

There have been a couple of bright spots thus far in earnings reports. At Diamond Shamrock, second-quarter earnings jumped 34% from a year ago, and sales moved up 6%. At W. R. Grace, second-quarter earnings climbed 36% as sales went up 13%.

At Texasgulf, second-quarter earnings rose 83% to about $599 million on a sales increase of 18.3% to nearly $241 million. □

Chemical execs' expectations fell sharply this spring



a U.S. executives' expectations on a scale of 0 (worst) to 100 (best) for own. industry (chemical executives) or general economy (all executives) six months ahead.
Source: Conference Board

U.S. chemical output decline accelerating

By the middle of May, U.S. chemical producers knew that the props had been knocked out from their business volume as the spreading U.S. recession reached their operations (C&EN, May 12, page 6). Now official figures show how bad the damage was that month and how sharply the recession is shaping up.

U.S. chemical production is in an accelerating decline, with the worst of it to date toward downstream or derivative products closer to the final consumer. Seasonally adjusted indexes from the Federal Reserve Board show production of chemicals and allied products in May at 204.7 (1967 = 100). This represents a 3% drop in just one month from a downward revised 210.2 in April. The April index figure is 2% below 214.5 in March.

The May production level is now 6% less than the record 217.7 in January during the industry's strong first quarter. May output is also below the level of a year ago by 2%; it's the first month to show a year-to-year decline.

At this rate, the chemical industry is roughly paralleling the overall drop in U.S. industrial production, starting at about the same time and proceeding at about the same rate. FRB's index for total industrial production in May was down 5% from the recent high point in January.

The total production index hints that June brought another thumping drop in chemical output. The overall index sank 2% in June to a seasonally adjusted 141.2 or at about the same rate as in May. Since the chemical indexes run a month behind the total indexes, it will be August before the extent of a chemical decline in June becomes evident.

However, Labor Department data on the workweek at chemical plants in June already hint that another production drop took place (C&EN, July 14, page 9). The workweek for chemicals and allied products fell in June to a seasonally adjusted 41.1 hours from 41.5 hours in May. As these data go, this is a substantial drop for one month.

Within the broad chemical industry, subindexes show that the production decline has reached upstream to the most basic products, but the steepest part of it is still in downstream polymers. For synthetic materials (plastics, fibers, and elastomers), FRB's seasonally adjusted index slumped 7% in May from April to 282.9. This level also is 12% below May 1979. The new reading for synthetic materials is now down 17% from the record high of 339.3 in January.

For basic chemicals, the production index slipped 1% in May from April to 189.6. This index also is down 1% from May 1979 and has fallen 4% from its record high of 196.9 in December 1979.

Chemical executives have lowered their sights in this production environment. In a quarterly survey in May of executive confidence by the Conference Board, a business research group in New York City, chemical chief executives rated the

May production fell hardest in polymers

Indexes, 1967 = 100	1980 May	April	March	February	January	1979 May	% change April–May	May–May
Chemicals and allied products	204.7	210.2	214.5	216.0	217.7	209.7	−3%	−2%
Chemicals and synthetic materials	220.3	228.5	234.0	238.1	243.2	233.8	−4	−6
Basic chemicals	189.6	191.9	196.0	193.7	196.0	190.8	−1	−1
Synthetic materials (polymers)	282.9	303.1	311.4	328.4	339.3	321.3	−7	−12
Total U.S. production[a]	144.7	148.3	151.7	152.3	152.6	152.4	−2	−5

a June index is 141.2, down 2% from May; June indexes for chemicals are lagged one month. **Source:** Federal Reserve Board

business outlook over the next six months at a low 37 on a scale of 0 to 100. This is down from 47 in February and 41 a year ago.

Chemical chief executives felt even worse about the current business scene in May. They rated their business condition compared to six months ago at 30 on a similar scale of 0 to 100, down from 46 in February and 57 in May 1979.

How far the production falloff will go and when it will stop are still open questions. June certainly brought no letup, and worsening price discounts in basic chemicals in July hint that this won't be the turnaround month either. Privately, some industry forecasters say the low point may not arrive until October, and recovery not until 1981. □